What is claimed is

1. A compound for inhibiting expression of angiogenin comprising an oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding angiogenin.

2. The compound of claim 1 wherein the base sequence is configured to bind to the target portion of the nucleic acid in a manner to inhibit the expression of angiogenin.

3. The compound of claim 2 wherein the oligonucleotide analog comprises a modified internucleotide linkage, a modified purine or pyrimidine moiety, a modified sugar moiety, a modified 5' hydroxyl moiety, a modified 3' hydroxyl moiety or a modified 2' hydroxyl moiety.

4. The compound of claim 3 wherein the modified internucleotide linkage comprises a substituent having an improved aqueous or lipid solubility or improved resistance to nuclease digestion.

5. The compound of claim 4 wherein the modified internucleotide linkage is selected from the group consisting of phosphorothioate, alkyl or cycloalkyl phosphorothioate, N-alkyl or cycloalkyl phosphoramidates, phosphorodithioates, alkyl or cycloalkyl phosphonates, phosphodiester, phosphotriester, C_1 - C_4 alkyl,

cycloalkyl, short chain heteroatomic or heterocyclic backbone, morpholino backbone, polyprotein-nucleic acid or peptide-nucleic acid backbone, polyamide, CH_2-NH-O-CH_2, CH_2-N(CH_3)-O-CH_2, CH_3-O-N(CH_3)-CH_2, CH_2-N(CH_3)-N(CH_3)-CH_2 and O-N(CH_3)-CH_2-CH_2.

6. The compound of claim 3 wherein the modified purine or pyrimidine moiety includes inosine.

7. The compound of claim 3 wherein the modified sugar moiety includes sugar mimetics comprising C_4 - C_8 cycloalkyl.

8. The compound of claim 3 wherein the modified 5' or 3' hydroxyl moiety is selected from the group consisting of C_{1-4} alkoxy, intercalating agent, peptide, enzyme, ribozyme, substituted acridine, 2-methoxy-6-chloro-9-pentylaminoacridine, N-(6-chloro-2-methoxyacridinyl)-O-methoxydisopropylaminophosphinyl-3-aminopropanol and N-(6 chloro-2-methoxyacridinyl)-O-methoxydisopropylaminophosphinyl-5-aminopentanol.

9. The compound of claim 1 wherein the modified 2' hydroxyl moiety is selected from the group consisting of OH, SH, SCH_2, OCH_3, F, OCN, OCH_6CH_3, OCH_3OCH_3, $OCH_3O(CH_2)_n CH_3$, $O(CH_2)_nNH_2$ or O $(CH_2)_nCH_3$ where n is from 1 to about 10; C_1 to C_{10} lower alkyl, substituted lower alkyl, alkaryl or aralkyl; Cl; Br; CN;

CF_3; OCF_3; O, S, or N-alkyl; O, S, or N-alkenyl; $SOCH_3$; SO_2CH_3; ONO_2; NO_2; N_3; NH_2; heterocycloalkyl or alkaryl; aminoalkylamino; polyalkylamino; substituted silyl; an RNA cleaving group; a cholesteryl group; a conjugate; a reporter group; an intercalator; a group for improving the pharmacokinetic properties of an oligonucleotide; and a group for improving the pharmacodynamic properties of an oligonucleotide.

10. The compound of claim 1 wherein the base sequence of the oligonucleotide or analog thereof is selected from the group consisting of

5'- GCCCATCACCATCTCTTC - 3',

5'- ACACGGCATCATGAATCA - 3',

5'-CCAGGGGCCCGCTGGTTA-3',

5'-ACCAAATTTTATATTCTA-3',

5'-CAGGCCCATCACCATCAC-3',

5'-GCCCAGGCCCATCACCAT-3', and

5'-TCTCTGACACGGCATCAT-3'.

11. A composition for inhibiting expression of angiogenin comprising an effective amount of an oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding angiogenin in a pharmaceutically acceptable carrier.

12. The composition of claim 11 wherein the base sequence of the oligonucleotide or analog thereof is selected from the group consisting of

5'- GCCCATCACCATCTCTTC - 3',

5'- ACACGGCATCATGAATCA - 3',

5'-CCAGGGGCCCGCTGGTTA-3',

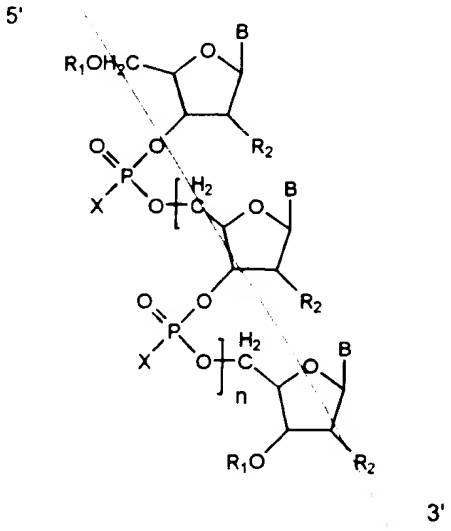
5'-ACCAAATTTTATATTCTA-3',

5'-CAGGCCCATCACCATCAC-3',

5'-GCCCAGGCCCATCACCAT-3', and

5'-TCTCTGACACGGCATCAT-3'.

13. A compound for inhibiting expression of angiogenin having the formula:



wherein

X is O, S, or C_{1-4} alkyl;

B is adenine, guanine, cytosine, or thymine selected such that the oligonucleotide has a complementary base sequence with a portion of a target nucleic acid strand coding for angiogenin thereby inhibiting expression thereof;

R_1 is H, C_{1-4} alkyl, intercalating agent, peptide, enzyme, ribozyme, substituted acridine, 2-methoxy-6-chloro-9-pentylaminoacridine, N-(6-chloro-2-methoxyacridinyl)-O-methoxydisopropylaminophosphinyl-3-aminopropanol and N-(6 chloro-2-methoxyacridinyl)-O-methoxydisopropylaminophosphinyl-5-aminopentanol. or substituted acridine;

R_2 is H, OH, SH, SCH_2, OCH_3, F, OCN, OCH_6CH_3, OCH_3OCH_3, $OCH_3O(CH_2)_n CH_3$, $O(CH_2)_nNH_2$ or $O(CH_2)_nCH_3$ where n is from 1 to about 10; C_1 to C_{10} lower alkyl, substituted lower alkyl, alkaryl or aralkyl; Cl; Br; CN; CF_3; OCF_3; O, S, or N-alkyl; O, S, or N-alkenyl; $SOCH_3$; SO_2CH_3; ONO_2; NO_2; N_3; NH_2; heterocycloalkyl or alkaryl; aminoalkylamino; polyalkylamino; substituted silyl: an RNA cleaving group; a cholesteryl group; a conjugate; a reporter group; an intercalator; a group for improving the pharmacokinetic properties of an oligonucleotide; or a group for improving the pharmacodynamic properties of an oligonucleotide; and

n is 5 to 100.

14. The compound of claim 13 wherein the base sequence is selected from the group consisting of

5'- GCCCATCACCATCTCTTC - 3',

5'- ACACGGCATCATGAATCA - 3',

5'-CCAGGGGCCCGCTGGTTA-3',

5'-ACCAAATTTTATATTCTA-3',

5'-CAGGCCCATCACCATCAC-3',

5'-GCCCAGGCCCATCACCAT-3', and

5'-TCTCTGACACGGCATCAT-3'.

15. A method for inhibiting expression of angiogenin in a mammal comprising administering to the mammal an effective amount of an oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding angiogenin so as to inhibit the expression of angiogenin.

16. A method for reducing size of tumors associated with angiogenesis in a mammal comprising administering to the mammal an effective amount of an oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding angiogenin so as to reduce tumor size.

17. A method for decreasing production of angiogenin in a mammal comprising administering to the mammal an effective amount of an oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding angiogenin so as to decrease production of angiogenin.

18. A method for inhibiting metastasis of tumor cells in a mammal comprising administering to the mammal an effective amount of an oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding angiogenin so as to inhibit metastasis of tumor cells.

19. A method for inhibiting the establishment of tumor cells in a mammal comprising administering to the mammal an effective amount of an oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding angiogenin so as to inhibit establishment of tumor cells.

20. A method for inhibiting growth of tumors associated with angiogenesis in a mammal comprising administering to the mammal an effective amount of an oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding angiogenin so as to inhibit tumor growth.

21. A method for detecting the presence of angiogenin in a sample comprising contacting the sample with a labeled oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding angiogenin;

allowing the labeled oligonucleotide or analog thereof to bind to the target portion of the nucleic acid encoding angiogenin; and

detecting the labeled oligonucleotide or analog thereof.

22. A method for detecting the presence of angiogenin in a mammal comprising administering to the mammal a labeled oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding angiogenin;

allowing the labeled oligonucleotide or analog thereof to bind to the target portion of the nucleic acid encoding angiogenin; and

detecting the labeled oligonucleotide or analog thereof.

23. A method for diagnosing conditions associated with abnormal angiogenesis in a mammal comprising administering to the mammal a labeled oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding angiogenin;

allowing the labeled oligonucleotide or analog thereof to bind to the target portion of the nucleic acid encoding angiogenin;

detecting the labeled oligonucleotide or analog thereof;

measuring the labeled oligonucleotide or analog thereof; and

determining the abnormal condition based on the detecting and measuring of the labeled oligonucleotide or analog thereof.